



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/840,020	04/24/2001	Sung Lyong Lee	Q62055	4252

7590

05/20/2005

SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC
2100 PENNSYLVANIA AVENUE, N.W.
WASHINGTON, DC 20037-3213

EXAMINER

TRAN, TRANG U

ART UNIT	PAPER NUMBER
----------	--------------

2614

DATE MAILED: 05/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/840,020

Applicant(s)

LEE, SUNG LYONG

Examiner

Trang U. Tran

Art Unit

2614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 December 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1 and 10 is/are allowed.
- 6) ☒ Claim(s) 2-9, 11 and 12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. Applicant's arguments with respect to claims 1-11 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 11-12 are rejected under 35 U.S.C. 102(e) as being anticipate by Wang (US Patent No. 6,292,203 B1).

In considering claim 11, Wang discloses all the claimed subject matter, note 1) the claimed a memory where own cursor display data is stored is met by the primary memory 304 which can be either ROM (read-only memory) or RAM (random-access memory) and is used to store a set of OSD symbols that can be selected for display on the display screen 106 (Fig. 3, col. 1, line 51 to col. 2, line 5), 2) the claimed a controller that receives cursor display location information from an OSD source is met by microprocessor 302 (Fig. 3, col. 1, line 51 to col. 2, line 31), and 3) the claimed a screen to display the own cursor display data at a cursor display location received from the OSD source is met by the display screen 106 which displays the OSD symbols "A", "B", and "c" along with a cursor mark (Figs. 2-3, col. 1, line 51 to col. 2, line 31).

In considering claim 12, the claimed wherein the display apparatus further comprises: a buffer for buffering OSD data is met by the display memory unit 306 (Fig. 3, col. 1, line 51 to col. 2, line 5), and an overlapper for overlapping image data and the OSD data and providing overlapped data to the screen is met by the overlapping circuit 308 (Fig. 3, col. 1, line 51 to col. 2, line 5).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2 and 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawamura et al. (US Patent No. 6,453,110 B1) in view of Wang (US Patent No. 6,292,203 B1).

In considering claim 2, Kawamura et al discloses all the claimed subject matter, note 1) the claimed a display apparatus that displays the cursor display data on a ~~screen in response to received cursor display location information is met by the display~~ device 500 which receives and displays a reproduced signal corresponding to the screen with a menu from the DVD player 400 displayed (Figs. 1 and 2, col. 4, line 47 to col. 7, line 25), 2) the claimed an OSD source remote controller for generating a cursor display command on a screen of said display apparatus is met by the remote commander signal generated by the remote commander 300 (operating means) which received by the remote commander signal receiver 31 (Figs. 1 and 2, col. 4, line 47 to

Art Unit: 2614

col. 7, line 25), and 3) the claimed an OSD source for receiving and storing the existence information of said own cursor display data, and transmitting the cursor display location information on the screen of said display apparatus to said display apparatus if the cursor display command is received from said OSD source remote controller is met by the DVD player 400 which has an OSD generator 41 for generating a menu screen form the information about a menu and so on supplied from the CPU 6 to the SC video encoder 45 (Figs. 1 and 2, col. 5, line 1 to col. 7, line 25).

However, Kawamura et al explicitly do not disclose the claimed a display apparatus which includes a memory where an own cursor display data is stored, a unit that outputs existence information of the own cursor display data, and a display that displays the own cursor display data on a screen by reading the own cursor display data stored in said memory.

Wang teaches that the OSD unit 104 used in the video display system 100, the OSD unit 104 includes a microprocessor 302, a primary memory unit 304, a display memory unit 306, and an overlapping circuit 308, the primary memory 304 which can be either ROM (read-only memory) or RAM (random-access memory) and is used to store a set of OSD symbols that can be selected for display on the display screen 106, during initialization, the microprocessor 302 retrieves the selected OSD symbols from the primary memory 304 and then transfers the retrieved OSD symbols to the display memory unit 306, when display request is received, the overlapping circuit 308 then displays the OSD symbols "A", "B", and "c" along with a cursor mark on the display screen 106 (Figs. 2-3, col. 1, line 51 to col. 2, line 5).

Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention to incorporate the OSD unit which includes the primary memory as taught by Wang into Kawamura et al's system in order to enhance the resolution of cursor movement on the display screen of the video display system.

In considering claim 7, Kawamura et al discloses all the claimed subject matter, note 1) the claimed wherein the display apparatus comprises: an MPEG decoder for decoding an MPEG transport stream and outputting image data is met by the DVC SD decoder 51 which decodes the data encoded into the format of DVCR SD or MPEG2-TS supplied from the I/F 21 into the original video data and audio data, this video data includes the data about the menu screen as show in Fig. 1 (Figs. 2 and 5, col. 1, line 57 to col. 2, line 34 and col. 6, lines 15-35), 2) the claimed a buffer for buffering OSD data is met by the DRAM 25 which stores the information such as a menu screen (Figs. 2 and 5, col. 1, line 57 to col. 2, line 34 and col. 6, lines 15-35), 3) the claimed an overlapper for overlapping the image data and the OSD data and providing overlapped data to the screen is met by the DVC SD decoder 51 which decodes the data encoded into the format of DVCR SD or MPEG2-TS supplied from the I/F 21 into the original video data and audio data, this video data includes the data about the menu screen as show in Fig. 1 (Figs. 2 and 5, col. 1, line 57 to col. 2, line 34 and col. 6, lines 15-35), and 4) the claimed a controller for controlling the MPEG decoder, the buffer, the overlapper, the memory, and the screen is met by the CPU 28 (Figs. 2 and 5, col. 1, line 57 to col. 2, line 34 and col. 6, line 15 to col. 9, line 47).

In considering claim 8, the claimed wherein the OSD image display apparatus further comprises: a display apparatus remote controller is met by the remote commander signal generated by the remote commander 300 (operating means) which received by the remote commander signal receiver 31 (Figs. 1 and 2, col. 4, line 47 to col. 7, line 25 of Kawamura et al).

In considering claim 9, the claimed wherein the display apparatus further comprises: a command input part for receiving a command signal from the display apparatus remote controller and providing the command signal to the controller is met by the remote commander signal generated by the remote commander 300 (operating means) which received by the remote commander signal receiver 31 (Figs. 1 and 2, col. 4, line 47 to col. 7, line 25 of Kawamura et al).

6. Claims 3-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawamura et al. (US Patent No. 6,453,110 B1) in view of Wang (US Patent No. 6,292,203 B1), and further in view of Min et al. (US Patent No. 6,462,746 B1).

In considering claim 3, Kawamura et al discloses all the claimed subject matter, note 1) the claimed wherein the OSD source comprises: an MPEG source for supplying a detected MPEG transport stream to the display apparatus is met by the DVD player 400 (Figs. 1 and 2, col. 5, line 1 to col. 6, line 30), 2) the claimed an OSD generator for generating OSD display data is met by the OSD generator 41 which generates a menu screen form the information about a menu and so on supplied from the CPU 6 to the SC video encoder 45 (Fig. 2, col. 5, line 1 to col. 6, line 35), 3) the claimed a register for storing data , and 4) the claimed a controller for controlling the MPEG source, the OSD

generator is met by the buffer 5 (Fig. 2, col. 5, line 1 to col. 6, line 35), and the register is met by the CPU 6 (Fig. 2, col. 5, line 1 to col. 6, line 35).

However, the combination of Kawamura et al and Wang explicitly does not disclose the claimed OSD display data in bitmap format.

Min et al teaches that referring back to Fig. 1, the memory 3 stores the video information and the OSD information, according to the present invention, the area storing the OSD information is divided into a command area and a bitmap area (Fig. 1, col. 7, lines 16-65).

Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention to incorporate the OSD display data in bitmap format as taught by Min et al into the combination of Kawamura et al and Wang's system in order to provide an OSD memory structure in the digital video display unit, wherein the OSD command information is optimized by separating a command area from the bitmap area and fixing positions of individual commands in the command area.

In considering claim 4, the combination of Kawamura et al, Wang and Min et al disclose all the limitations of the instant invention as discussed in claims 2 and 3, except for providing the claimed wherein the register is an output asynchronous plug register. The capability of using the register is an output asynchronous plug register is old and well known in the art. Therefore, the Official Notice is taken. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention to incorporate the old and well known of using the register is an output asynchronous plug register into

Art Unit: 2614

the combination of Kawamura et al, Wang and Min et al's system since it merely selecting available registers.

In considering claim 5, the claimed wherein the OSD source and the display apparatus are connected through an IEEE 1394 bus is met by the IEEE 1394 bus (Fig. 1, col. 4, lines 47-56 of Kawamura et al).

In considering claim 6, the claimed wherein the OSD source further comprises: a command input part for receiving a command signal from the OSD source remote controller and providing the command signal to the controller is met by the remote commander signal generated by the remote commander 300 (operating means) which received by the remote commander signal receiver 31 (Figs. 1 and 2, col. 4, line 47 to col. 7, line 25 of Kawamura et al).

Allowable Subject Matter

7. Claims 1 and 10 are allowed.

Claim 1 identifies the distinct features: "checking whether said display apparatus has the own cursor display data, when an OSD cursor is to be transmitted from said OSD source to said display apparatus; transmitting only cursor display location information in said OSD source, if said display apparatus has the own cursor display data; and displaying the own cursor display data at a cursor display location received in the display apparatus". The closest prior art, Kawamura et al. (US Patent No. 6,453,110 B1) and Min et al. (US Patent No. 6,462,746 B1), either singularly or in combination, fail to anticipate or render the above underlined limitations obvious.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Trang U. Tran whose telephone number is (571) 272-7358. The examiner can normally be reached on 8:00 AM - 5:30 PM, Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W. Miller can be reached on (571) 272-7353. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2614

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TT TT
May 10, 2005


JOHN MILLER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600